Distance Learning

Integrating Space Applications Through Education

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Presentation to the AF ADL Conference
on behalf of SWC/DOT
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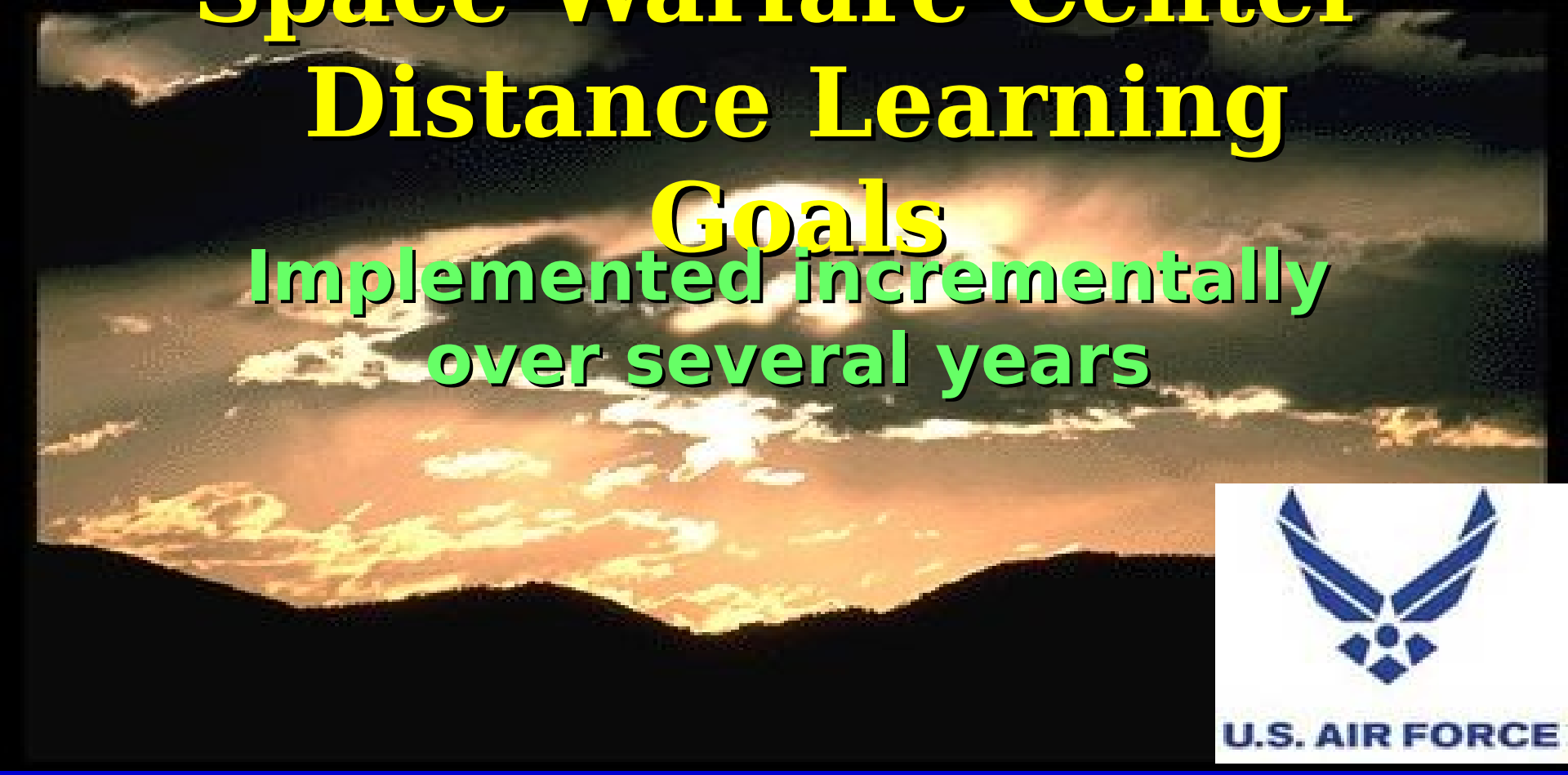
Space Warfare Center Distance Learning Goals

Implemented incrementally over several years



U.S. AIR FORCE

- Improve instruction
- Reach wider audience than classroom instruction
- Save formal classroom hours
- Save budget $$$$

SWC/DOT Approach 1

- **Computer-Based Training Modules**
  - An Introduction to the Space Environment
  - An Introduction to Orbital Mechanics
  - Satellite Communications Fundamentals

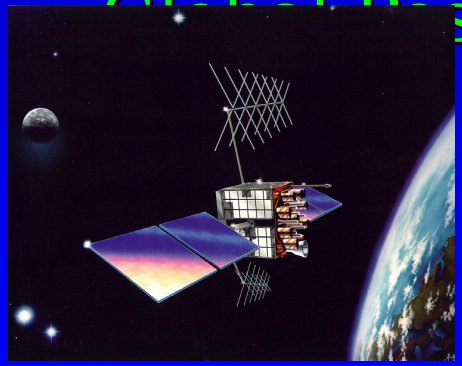
Future Computer-Based Training Efforts

Threats and Vulnerabili

in developm

Global Positioning System (GPS)

(planned FY01)



SWC/DOT Approach 2

- **Web-Based Training**
  - **AOC Space Applications Course** (ASAC)
    - CLEON--NRO on SIPRNET (www.cleon.nro.smil.mil)
  - **Space Warrior Course** with a COTS LMS front
    - *in development for* SIPRNET
  - **Space Planning & Employment Course** (SPEC)
    - *future development*

SWC/DOT Supporting Air University Space Chair

- **Air War College Space Electi**
  - CD-ROMs for students
- **Air Command and Staff College Space Electives**
  - CD-ROMs for students
- **Space Reference Guide**
  - Updated annually, available on AWC and ACSC LANs and AWC website, as well as on CD-ROMs

SWC DL Lessons Learned 1

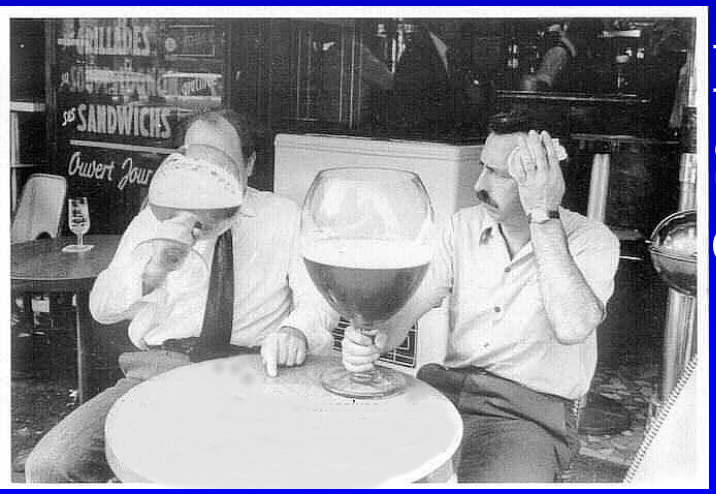
- Static, fairly stable material - CBT
  - Updated on 1-2 year cycle
  - Need to track revisions
- Dynamic, changeable material - WBT
  - Updated 2-5 times per year
- Target audience expects interaction, graphics, motion
- Stay current on new DL technologies
  - Staff software proficiency important
  - Project managers need to understand trends

SWC DL Lessons Learned 2

- SIPRNET WBT delivery presents unique challenges
  - UNIX and PC compatibility
    - No Shockwave, possibly no speakers
  - Bandwidth issues
    - SIPRNET connection speeds vary, even on a base
  - More controls on classified servers
    - Classified markings of items; CW uploads
- Verification and Validation of objectives and user operation time consuming
  - Need independent V&V

Nobody Said It Would Be Easy

- Requires investment
  - Time
  - People
  - Resources
- Desired results are achievable
  - Reach wider audience
  - Improve instruction -- highly rated
  - Save $$$ -- may not be yours, but good for AF



Reaching Beyond the Classroom

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